

**Illinois Commerce Commission Report to the General Assembly:  
Experimental Programs Initiated by Electric Utilities Under Section 16-  
106 of the Electric Service Customer Choice and Rate Relief Law of 1997  
During 2004**

**The Illinois Commerce Commission**

**November 2005**

## **Executive Summary**

The Illinois Commerce Commission (“Commission”) submits its seventh annual Report to the General Assembly regarding experimental programs implemented by electric utilities pursuant to Section 16-106 of the Electric Service Customer Choice and Rate Relief Law of 1997, 220 ILCS 5/16-106 (“Customer Choice Law”).

Electric utilities have operated a total of nineteen experimental programs since the Customer Choice Law was enacted in December 1997. However, only three programs were in effect during 2004 and those programs are not available to new customers.

The significant reduction in the number of Section 16-106 experimental programs is the result of the Commission’s adoption in February 2002 of 83 Illinois Administrative Code 452 (“Part 452”). Part 452 limits the ability of the electric utilities subject to Part 452 to offer new programs without first obtaining Commission approval. Even though Part 452 did not require the electric utilities to terminate their existing programs, ComEd cancelled all but one of its remaining programs. AmerenCIPS and AmerenUE closed enrollment to the two load curtailment programs that they initiated in 1999.

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## **I. Introduction**

The “Electric Service Customer Choice and Rate Relief Law of 1997” (“Customer Choice Law”), enacted into law on December 17, 1997, made a number of significant changes to the Public Utilities Act (“Act”). Among the changes is new Section 16-106, which permits electric utilities to offer experimental programs at their discretion to a selected group of customers. According to Section 16-106, programs offered under this section of the Act may include experiments for the “provision or billing of services on a consolidated or aggregated basis, as well as other experimental programs.

Section 16-106 requires the Commission to report annually to the General Assembly describing the Commission’s evaluation of the “progress, participation and effects” of these programs. This is the Commission’s seventh report to the General Assembly concerning Section 16-106 programs.”<sup>1</sup>

To date, four electric utilities, AmerenCIPS, AmerenUE, ComEd, and Illinois Power Company, have undertaken a total of nineteen experimental programs that were filed with the Commission pursuant to Section 16-106. AmerenCIPS has operated one program, AmerenUE has operated two programs and Illinois Power has operated three programs. ComEd has operated a total of thirteen programs.

The large reduction in the number of programs follows the Commission’s adoption of 83 Illinois Administrative Code 452 (“Part 452”) in February 2002. Part 452 restricts the ability of an electric utility electing to organize as an “Integrated Distribution Company” to offer new programs involving the sale of power and energy (however, electric utilities may, with Commission approval, offer experimental programs, and existing programs were permitted to continue).<sup>2</sup>

Following the adoption of Part 452, ComEd cancelled its remaining experimental programs except for the one program, the “High Density Electrical Load Commercial Installation Pricing Experiment,” that was still in effect in 2004. Only one customer was participating in ComEd’s sole experimental program, and the program is closed to new customers.

AmerenCIPS and AmerenUE each initiated an experimental load curtailment program in 1999. However, neither Ameren company has called a curtailment under the programs. The Commission has now approved tariffed load curtailment programs for the Ameren companies that largely duplicate the experimental programs. Thus the Ameren programs essentially have been terminated.

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<sup>1</sup> Section II of this report describes Section 16-106 requirements in more detail.

<sup>2</sup> No Section 16-106 programs have been submitted for approval since the adoption of Part 452.

In previous reports, the Commission presented its assessment of the programs that have been offered Section 16-106. Here is a brief summary of the Commission's general conclusions about Section 16-106 programs:

- Utilities operated two general types of experimental programs. First, electric utilities offered programs to narrowly defined customer groups. ComEd has operated several programs of this type. The second general program concerns measures to address reliability issues, such as the load curtailment programs offered by the Ameren companies, Illinois Power, and ComEd.
- There should be no direct impact of the experimental programs on the rates of customers not participating in the programs because the Commission is required to exclude the costs and revenues associated with Section 16-106 programs when setting electric rates.
- Customers in retail businesses who do not obtain discounts associated with some of the experimental programs could face a slight competitive disadvantage relative to the customers who receive the discounts; this advantage will persist until December 31, 2006, the date at which electric utilities may no longer impose transition charges on customers who take delivery services.
- Customer savings and expenditures by ComEd on Section 16-106 programs have been significant, exceeding well over \$100 million. Even though ComEd has terminated its large-scale programs, the discounts applicable to participating customers will serve to reduce transition charges for those customers until the end of the Mandatory Transition Period on December 31, 2006.
- The Commission believes that the value of the information obtained from some of the programs obtained is lower than the costs associated with those programs.
- Companies that have implemented Section 16-106 programs could have submitted these programs to the Commission for approval, which would have permitted the Commission to review and comment on the programs prior to their implementation.

As required by Section 16-106, the companies offering experimental programs filed notices with the Commission containing statements describing their programs. The notices generally included the following information: effective program dates; program availability; general program purpose and objectives; and, participation incentives (e.g., rate discounts), if any. The letters sent to the Commission accompanying each notice typically reflected the Companies' interpretation of Section 16-106 that an experimental program becomes effective upon the filing of a notice with the Commission. The

Companies have provided information and reports to the Commission to assist the Commission in preparing the Commission's Section 16-106 reports.

The balance of this Report describes in more detail the programs filed under Section 16-106 that were in effect during 2004. As required by Section 16-106, the Report also describes the Commission's assessment of the "progress, participation and effects" of each of the programs. After each program description, a table is presented showing summary information about the program. The Appendix to the Report contains a listing of each Section 16-106 program that electric utilities implemented during 1997-2003.

## **II. Section 16-106 of the Public Utilities Act**

The authority provided electric utilities to offer certain types of experimental programs is stated in Section 16-106 as follows:

Sec. 16-106. Billing experiments. During the mandatory transition period,<sup>3</sup> an electric utility may **at its discretion** conduct one or more experiments.... (Emphasis supplied)

Section 16-106 states that electric utilities may choose which customers are eligible for billing experiments (and, of course, which are not eligible), and that the Commission should allow the experiments to proceed:<sup>4</sup>

The offering of such a program by an electric utility to retail customers participating in the program, and the participation by those customers in the program, shall not create any right in any other retail customer or group of customers to participate in the same or a similar program. The Commission shall allow such experiments to go into effect upon the filing by the electric utility of a statement describing the program...

Section 16-106 makes clear, however, that the Commission retains its authority to approve experimental programs submitted to the Commission for approval under Sections of the Act other than Section 16-106:<sup>5</sup>

Nothing contained in this Section shall be deemed to prohibit the electric utility from offering, or the Commission from approving, experimental rates, tariffs and services in addition to those allowed under this Section.

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<sup>3</sup>The "mandatory transition period" will end on January 1, 2007.

<sup>4</sup> The Commission has not undertaken any formal investigation to determine whether any of the experimental programs are consistent with Section 16-106.

<sup>5</sup> No experimental programs have been brought by electric utilities to the Commission for approval since the enactment of the Customer Choice Law.

It thus appears that one effect of Section 16-106 is to provide electric utilities that desire to implement experimental programs with a choice. Utilities may either (1) submit the program to the Commission for approval in the traditional manner; or, (2) implement a qualifying program as a billing experiment pursuant to Section 16-106.

Section 16-106 lists the types of billing experiments that may be offered by electric utilities. The experiments may include those

...for the provision or billing of services on a consolidated or aggregated basis, for the provision of real-time pricing, or other billing or pricing experiments, and may include experimental programs offered to groups of retail customers possessing common attributes as defined by the electric utility, such as the members of an organization that was established to serve a well-defined industry group, companies having multiple sites, or closely-located or affiliated buildings, provided that such groups exist for a purpose other than obtaining energy services and have been in existence for at least 10 years.

The Commission must inform the General Assembly about the experiments filed under Section 16-106:

The Commission shall review and report annually the progress, participation and effects of such experiments to the General Assembly. Based upon its review, recommendations for modification of such experiments may be made by the Commission to the Illinois General Assembly.

### **III. Voluntary Curtailment Billing Experiments (AmerenCIPS/AmerenUE)**

#### **A. Program Summary**

In 1999, AmerenCIPS and AmerenUE filed statements with the Commission describing their intention to implement "Voluntary Curtailment Billing Experiments."

Ameren's filings Ameren state that the curtailment programs have three purposes:

- To provide Ameren with "additional flexibility in providing reliable power and energy to its native load customers during periods of power supply constraints;"
- To provide "participating customers an opportunity to realize additional benefits from operation of customer-owned generation and/or load management activities when asked to do so by Ameren"; and
- To reduce "Ameren's incremental cost of power and energy."

Ameren's statements noted that customers might be asked to curtail load during periods other than at a time of system peak demand.

The programs are available to those customers with interval meters who agree to curtail an average of 1,000 kWh per hour during the specified curtailment period. The programs are also available to multi-premises or multi-metered customers who agree to accept notification at a single location and also agree to curtail an average of 500 kWh per hour at three or more premises or meter locations.

Potential participants must demonstrate to Ameren their ability to comply with the provisions of the experimental program. The statement filed by Ameren indicates that the Companies will use their "sole discretion" in determining which customers may participate in the programs. Customers are not required to participate in each curtailment called by Ameren, but could be terminated from the program should they repeatedly decline to curtail load when asked to do so.

Notification to customers of curtailment periods will occur either by 8:00 a.m. on the day prior to, or the morning of, the curtailment. Customers will be advised of the duration of the curtailment and the price per kWh customers will pay for the curtailment. Customers who intend to participate in a curtailment must indicate their desire to participate by 10:00 a.m. of the day the notification was given.

The statements indicated that customers would not receive a demand credit for participation. AmerenCIPS' statement indicates that participating customers may also be subject to a monthly "Meter Translation Charge" and will be charged an "Administrative Charge" for each curtailment. However, Ameren later made the decision to implement the program without applying the Administrative Charge."

## **B. Program Participation, Progress and Effects**

No curtailments were called during 1999-2004.

Subsequent to the Commission's adoption of Part 452, Ameren received approval to implement Rider OBC and Rider VC, load curtailment programs whose terms and conditions are similar to those of the Voluntary Curtailment Billing Experiments. The customers eligible for the experimental programs are eligible for either or both of the new Riders. With the implementation of Rider OBC and Rider VC, Ameren has effectively closed its experimental programs.



**Table 1: Voluntary Curtailment Billing Experiments**

<b>VOLUNTARY CURTAILMENT BILLING EXPERIMENT (AMERENCIPS AND AMERENUE)</b>			
<b>Program Type / Effective Dates</b>	<b>Program Objectives</b>	<b>Eligible Customers / Participation Incentives</b>	<b>Program Results / Expenditures</b>
<p>The AmerenCIPS billing program began March 19, 1999.</p> <p>The AmerenUE billing program began May 17, 1999.</p>	<p>To assist AmerenCIPS and AmerenUE in providing power and energy during periods of power supply constraints.</p>	<p>AmerenCIPS: Customers who can curtail demand by 1 MW at a single site or 500 kW at 3 or more sites.</p> <p>AmerenUE: Customers who can curtail demand by 1 MW at a single site</p> <p>Customers receive a credit for each kWh curtailed.</p>	<p>No curtailments were called during 1999-2004. AmerenCIPS and AmerenUE obtained approval to offer load curtailment programs (Rider OBC and Rider VC) under tariff. These riders are similar to the experimental program, which is no longer being used.</p>

#### **IV. High Density Electrical Load Commercial Installation Pricing Experiment (ComEd)**

ComEd operated one experimental program during 2004.

##### **A. Program Summary**

On January 26, 2001, ComEd offered a program to nonresidential customers with potentially unusually high electrical load density requirements. This program was offered as an alternative to Rider 6, which was available to customers with nonstandard loads, such high-density loads. Customers proposing projects with electrical load requirements exceeding 20 Watts per square foot were eligible for the program. The program was closed to new participants as of February 1, 2002.

Technological developments have led to the creation of businesses that (should the businesses be successful) could use electricity at a significantly higher rate than businesses housed in similarly sized structures. According to ComEd, these businesses, which are referred to as “internet hotels” and by similar names, may use 10 to 20 times more electricity per square foot than typical commercial buildings.

The nature of such business projects is that the project developers must estimate the businesses’ electrical needs in advance. However, the projected electric requirements of such projects may not materialize, leaving unused (and potentially unpaid for) distribution facilities.

ComEd stated that it created this program to facilitate the installation of the facilities needed by high-density commercial customers while accounting for the risk that projected load might not be met. The program required participating customers to pay a refundable installation charge to ComEd, which will install all required equipment. As the customer's electric load grows above the stated norm of 8 Watts per square foot, ComEd would refund all or some of the customer's installation charges. ComEd stated that this procedure would put the customer in the position of deciding whether it wanted ComEd to proceed with facilities installation, without adding to the risk that ComEd might not be compensated if the customer's projected electric requirements failed to materialize.

Yearly refunds of the installation charges paid in advance by a participating customer were to be calculated based on a refund mechanism described in the notice ComEd filed with the Commission. To receive a total refund of all installation charges the customer's electric load would have to reach the projected level within five years of the inception of the customer's participation. If the customer's load level has not reached 90% of the projected level within five years, ComEd would retain all remaining non-refunded charges.

ComEd stated that this program would help ComEd in gathering data concerning the actual electric load of high-density use facilities. ComEd also stated that the program would help it assess customers' accuracy in projecting the customers' electric requirements.

The determination of the number of customers eligible for the program was at the discretion of ComEd, which retained the right to amend or terminate the program at any time.

#### **B. Program Participation, Progress and Effects**

Approximately 60 customers contacted ComEd regarding high-density electrical load facilities. ComEd made presentations about the program to 30 of these customers. One customer is taking service under the experiment and paid its refundable installation charge in the form of a surety bond.

ComEd believes that the program met its objectives during the limited time the experiment was in effect, as developers made more realistic load requirement estimates for their projects. ComEd also believed that the program lessened the risk that ComEd and its customers will bear the cost for developers' overoptimistic estimates of the amount of electrical infrastructure capacity they will need to support their projects. However, with the subsequent bursting of the so-called "internet bubble," customer interest in such projects has dropped dramatically.

ComEd is now providing a similar service to customers that would have otherwise qualified to participate in the program through ComEd's Rider 2 (Electric Line Extensions).

**Table 2: High Density Electrical Load Commercial Installation Pricing Experiment**

HIGH DENSITY ELECTRICAL LOAD COMMERCIAL INSTALLATION PRICING EXPERIMENT			
Program Type / Effective Dates	Program Objectives	Eligible Customers / Participation Incentives	Program Results / Expenditures
Pricing program started on January 26, 2001 and closed to new participants on February 1, 2002. Similar service is now offered under Rider 2.	To assist ComEd in gathering data concerning the actual electric load of high-density use facilities and customers' accuracy in projecting load electric requirements.	Non-residential customers are eligible. ComEd will construct facilities for customers upon payment of an installation fee.	One customer is participating in the program. ComEd believes that developers have made more realistic estimates of their need for electrical infrastructure capacity.

## V. Conclusion

The number of experimental programs has decreased significantly since the Commission's of Part 452 and the electric utilities' subsequent election of their status as Integrated Distribution Companies. Other than the load curtailment programs offered by AmerenCIPS and AmerenUE, only one program filed under Section 16-106 of the Act was still in operation during 2004. This program, the "High Density Electrical Load Commercial Installation Pricing Experiment," offered by ComEd, is closed to new customers and now only a single customer is participating in the program. The Ameren companies now operate load curtailment programs under tariffs approved by the Commission, so their experimental load curtailment programs will no longer be used.

A listing of the programs that were in effect since 1997 can be found in the Appendix to this report. Readers interested in the Commission's assessment of these programs are referred to the Commission's previous reports submitted to the General Assembly.

## Appendix

**Table 3: List of Section 16-106 Experimental Programs, 1997-2004**

<b>Name of Program</b>	<b>Program Dates</b>	<b>Electric Utility</b>	<b>Eligible Customers</b>
Voluntary Curtailment Billing Experiment	3/19/1999 - Present	AmerenCIPS	Nonresidential customers
Pay As You Go Billing Program	9/10/1999 - 9/2001	AmerenUE	Low-income customers
Voluntary Curtailment Billing Experiment	5/17/1999 - Present	AmerenUE	Nonresidential customers
Affinity Group Billing Experiment	12/31/1997 - 12/31/2000	ComEd	IRMA members only
Consolidated Billing Experiment - Revised	12/31/1999 - 6/30/2001	ComEd	Commercial customers
Dispatchable Back-Up Generation and Distribution Reliability Pricing Experiment	6/12/2000 - 5/1/2002	ComEd	Nonresidential customers
Enhanced Distribution Billing and Pricing Experiment	10/23/2001 - 2/1/2002	ComEd	Customers showing need for continuous service
High Density Electrical Load Commercial Installation Pricing Experiment	1/26/2001 - 2/1/2002	ComEd	High-density use customers
Load Curtailment and Generated Energy Procurement Pricing Experiment I	6/26/1998 - 7/3/1998	ComEd	Nonresidential customers
Load Curtailment and Generated Energy Procurement Pricing Experiment II	7/14/1998 - 12/31/1998	ComEd	Nonresidential customers
2000 Load Curtailment Pricing Experiment for Electric Service - Revised	5/4/2000 - 12/31/2000	ComEd	Nonresidential customers
Low Consumption Communication Network Device Billing and Pricing Experiment	2/22/2001 - 2/1/2002	ComEd	Customers with low-consumption communication devices

**Table 3: (Continued): List of Section 16-106 Experimental Programs, 1997-2004**

<b>Name of Program</b>	<b>Program Dates</b>	<b>Electric Utility</b>	<b>Eligible Customers</b>
Reliability and Restoration Pricing Experiment	5/30/2000 – 12/31/2000	ComEd	Customers whose service was interrupted
Student Power 2000 Pricing Experiment	1/30/1998 – 12/31/2000	ComEd	Public and private grade K-12 schools
Wind and Photovoltaic Generation Pricing Experiment	2/7/2000 – 2/1/2002	ComEd	Customers owning a wind or photovoltaic generator
2002 Voluntary Load Response and System Reliability Initiative Experiment	1/24/2002 – 12/31/2002	ComEd	Nonresidential customers
Load Reduction Pricing Experiment	6/8/2000 – 12/31/2004	Illinois Power	Nonresidential customers
Large Customer Conservation Pricing Experiment	7/24/1998- 9/30/1998	Illinois Power	Nonresidential customers
Small Customer Conservation Appreciation Pricing Experiment	7/22/1998- 8/1998	Illinois Power	Small-use customers